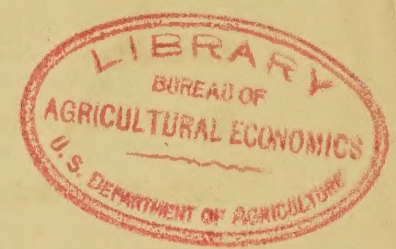


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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
DIVISION OF MARKETING AND MARKETING AGREEMENTS



ECONOMIC STATEMENT RELATING TO THE MARKETING OF
PACIFIC COAST FALL AND WINTER PEARS

Prepared by H. H. Stippler, Associate Agricultural Economist,
for the purpose of assisting in the consideration of a pro-
posed marketing agreement and order for Fall and Winter Pears
grown in the States of California, Oregon, and Washington.

General Crops Section
Economic Analysis Unit

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ECONOMIC STATEMENT RELATING TO THE MARKETING OF
PACIFIC COAST FALL AND WINTER PEARS

Summary

1. The major varieties of fall and winter pears grown on the Pacific Coast are, in the order of their importance as indicated by the number of acres standing in 1936, d'Anjou, Beurre Bosc, Winter Nelis, Beurre Hardy, and Du Comice. D'Anjou pears with an acreage of 9,860 acres or 35 percent of the total late pear acreage are grown mainly in both districts of Oregon and Washington. Beurre Bosc pears with an acreage of 6,070 or 21 percent of the fall and winter pear acreage are grown in the Medford District of Oregon and the Foothill Regions of the Sierra Mountains in California. The Winter Nelis variety with 4,330 acres or 15 percent of the total late pear acreage is grown mainly in California, the Yakima District of Washington, and the Medford District of Oregon. The Beurre Hardy variety with 2,770 acres is the fourth major variety of late pears. The fact that this variety is produced only in California, has a comparatively early and short marketing season and is sold chiefly in export markets, gives it a special position in late pear marketing.

2. The marketing period for fall and winter pears extends from August of one year to June of the following year. The season begins with the marketing of California Hardy pears, continues with the marketing of Beurre Bosc and Comice pears in September, October, and November and closes with Anjou and Winter Nelis sales beginning in November and ending in May and June of the following year. The shipments of California

late pears reach the market before the same varieties from Oregon and Washington are ready to be shipped. Export shipments are made mainly during the early part of the season and because of competition from unstored foreign pears do not continue in volume during the rest of the season.

3. Shipping records for the 1934 and 1936 seasons indicate an average volume of 3,497,000 boxes of domestic and foreign shipments. Approximately 33 percent of the volume shipped during the above three seasons originated in California, 28 percent in Oregon, and 39 percent in Washington. Over 1,500,000 boxes or 44 percent of the total were sold in export markets. Most of the pears from the two Oregon districts and the Wenatchee District in Washington are shipped to domestic markets. Over 50 percent of all shipments from California and the Yakima District in Washington are sold to foreign countries.

4. The average volume of late pears shipped to domestic markets during the 1934-35 to 1936-37 seasons was 1,966,000 boxes, 88 percent were sold in 18 Northeastern States while Central and Southern States received only 5 percent of the domestic shipments. Relating the average shipments of late pears to the population in cities of 10,000 inhabitants and over, shipments to the Northeastern States averaged 42 boxes per 1,000 of urban population while those to Central and Southern States averaged 8.5 boxes per 1,000. The average of all domestic shipments in relation to urban population was 33.7 boxes per 1,000 persons of urban population.

5. Export shipments of late pears were made primarily to Europe. This continent received on the average of the 1934 to 1936 seasons 82 percent of all export shipments. Only a small volume of pears is sold on each of the other continents.

6. New York auction prices of fall and winter pears declined drastically during the last ten-year period. For most varieties, prices during the 1937 season were only half of those prevailing during the period prior to 1928.

7. Returns to growers for the major varieties of fall and winter pears prior to 1929 averaged around \$2.00 per box or over. Beginning with the 1930 season, growers witnessed a drastic reduction in their income, reaching the lowest point in 1932. Since that year returns have fluctuated but have been considerably below returns prior to 1929. The decline to growers was more drastic in the case of the Beurre Bosc and Winter Nelis varieties than in the case of d'Anjou pears.

8. An analysis of the net returns to growers from New York auction sales of Oregon and Washington Beurre Bosc and d'Anjou pears by grades and sizes indicates that sales of pears grading below the Fancy grade resulted in losses to the grower. With regard to returns from sales of the various size-groups of Oregon and Washington d'Anjou and Beurre Bosc pears, sizes smaller than 180 and those larger than 110, sold from 13 to 30 cents and 12 to 19 cents, respectively, below the preferred size-group of sizes 120 to 180. For Winter Nelis pears the sales of the largest sizes, in most cases, resulted in the highest returns, those of smaller sizes were discounted as the size declined.

9. Prices received by growers since 1930 have been considerably below the level of prices necessary to give producers a purchasing power per unit comparable to that which prevailed during the base period 1919-1928. Prices received by growers in California during the 1937 season were 22 per cent of parity. Prices of d'Anjou and Beurre Bosc pears grown in the Medford District of Oregon during the past season were 16 and 11 per cent, respectively, of parity prices. Washington d'Anjou pears returned to growers an average of \$0.13 per box during the 1937 season while sales of Bosc pears resulted in a loss of \$0.28 per box. Parity for these varieties is \$1.43 and \$1.55, respectively.

10. Production of fall and winter pears is limited almost exclusively to the three Pacific Coast States of Oregon, Washington, and California. Of the total late pear acreage on the Pacific Coast of approximately 28,500 acres, 34 per cent are located in California, 43 per cent in Oregon, and 23 per cent in Washington.

11. Production of late pears on the Pacific Coast is concentrated in six major districts, two in each of the three states. In California, the Santa Clara Valley and the Foothill Region of the Sierra Mountains are the most important late pear producing areas. In Oregon, the Medford District and the Hood River District, including Skamania and Klickitat Counties of Washington, are the major producing areas. Late pear production in the state of Washington is concentrated in the Yakima and Wenatchee Districts.

12. The volume of fall and winter pears produced on the Pacific Coast during the five-year period 1933-1937 amounted to approximately 110,000 tons, an increase of 22 per cent over the preceding five-year period. Late pear production in California, comparing the same two five-year periods, has increased by 6 per cent, in Oregon by 26 per cent, and in Washington by 33 per cent. In all three states indications point toward a much larger crop in 1938. The total Pacific Coast late pear production for this year is indicated to be 148,000 tons.

ECONOMIC STATEMENT RELATING TO THE MARKETING OF
PACIFIC COAST FALL AND WINTER PEARS

Major Varieties of Fall and Winter Pears

The major varieties of fall and winter pears¹ in the order of their importance as evidenced by the number of acres standing in 1936 are: D'Anjou, 9,860 acres; Beurre Bosc, 6,070 acres; Winter Nelis, 4,330 acres; Beurre Hardy, 2,770 acres; and du Comice, 1,850 acres. In addition to these there are 3,610 acres of miscellaneous minor varieties which, although comparatively insignificant in total late pear production, are of considerable importance in certain local areas of the Pacific Coast region.

Except for the Beurre Hardy pear, which is produced in California exclusively, all major late pear varieties are found in each of the pear districts of the three Pacific Coast states. The fact that the Beurre Hardy variety is produced only in California, has a comparatively early and short marketing period, and is sold chiefly in export markets, gives this variety somewhat of a special position in late pear production and marketing.

¹/ The term "fall and winter pears" or "late pears" refers to the late dessert varieties of pears which are consumed in fresh form. This definition, for all practical purposes, includes all pears grown on the Pacific Coast except the Bartlett varieties. In Eastern and Southern States, the production of all pears includes, besides the Bartlett and fall and winter pear varieties, the Kieffer and miscellaneous other varieties which are used extensively for canning and home preserves.

The most important of all winter pear varieties in size of plantings is the d'Anjou variety. It comprises 35 percent of the total late pear acreage and is grown extensively in both districts of Oregon and Washington. The comparatively small acreage in California is located in the Santa Clara Valley District and the Foothill regions of the Sierra Mountains. Of the total acreage of d'Anjou pears California has 6 percent, Oregon 63 percent and Washington 31 percent. The Beurre Bosc variety accounts for 21 percent of the late pear acreage on the West Coast. Over one-half, or 58 percent, is grown in Oregon where the Medford District with about 2,660 acres has 44 percent of the total acreage on the Pacific Coast. In California where 22 percent of the Bosc acreage is located, the Sacramento Valley-Foothill District is the major producing area. In Washington the Yakima District is most important in Bosc production, the state as a whole, however, has only 20 percent of the total Bosc acreage. The Winter Nelis variety is the third in size of plantings, amounting to 15 percent of the total acreage of pears on the Pacific Coast. Except for the Beurre Hardy variety, it is the most important late pear grown in California. This state with 42 percent of the total leads the others in acreage of Winter Nelis pears. Washington with 36 percent of the total follows in extent of plantings which are confined almost exclusively to the Yakima District. In Oregon where 22 percent of the acreage of Winter Nelis pears is located nearly all of the plantings are in the Medford District. The acreage of the Comice variety, amounting to 6 percent of the total, is concentrated in the

Santa Clara Valley District of California and the Medford District of Oregon. Other districts on the Pacific Coast are unimportant in Comice production. The percentage distribution of this variety by states is California 51 percent, Oregon 46 percent, and Washington 3 percent.

Marketing Season

The marketing period of West Coast fall and winter pears extends from August of one year to June of the following year. The season begins with the marketing of California Hardy pears during the early part of August and ends in June with the sales of Winter Nelis pears.

California ships late pears before the movement of similar varieties from other states begins. The Beurre Hardy pear, although the first variety to be harvested and marketed during the second half of the Bartlett season, is of minor importance with regard to the marketing of late varieties in domestic markets. Normally between 90 and 95 percent of the shipments are destined to foreign markets, chiefly to Great Britain. Domestic shipments of California d'Anjou, Beurre Bosc, Comice and Winter Nelis pears reach the market before the same varieties from Oregon and Washington are ready to be shipped. Beginning gradually in the middle of August, California's domestic shipments reach their peak for the season early in October when the shipments of Washington and Oregon late pears are heavy but have not reached their peak.

Domestic shipments of late pears from Oregon and Washington begin approximately at the end of August or early in September. The peak is reached between the 1st and 15th of November, about one month

after California shipments have reached their maximum. In contrast to the movement of Bartlett pears, West Coast late pear varieties are marketed during every month of the year with the possible exception of July. The major part moves into consumption channels shortly after harvest. The remainder of the crop is stored and marketed during the period from November to June.

The storage life of late pears and consequently the marketing season varies considerably by varieties. The Beurre Hardy variety from California is marketed immediately following harvest and not held in storage after October. The Beurre Bosc variety is marketed between September and January and only in years of large crops do sales extend into February and March. The storage life of this variety, however, does not permit to hold them without serious losses after January. The Comice is another variety which has a comparatively limited storage life. Its season extends from the beginning of November to the end of January. The variety having the best keeping quality and extending its marketing season over the longest period is the d'Anjou variety. The marketing season extends from November 1st into May of the following year. The Winter Nelis variety is not ready for consumption before the beginning of December and is the last of the major varieties sold at the end of the winter pear marketing season. The Beurre Bosc and Winter Nelis varieties require special ripening after being removed from cold storage.

With respect to the export season for Pacific Coast fall and winter pears, records indicate that, in contrast to the period of domestic shipments, exports after December are small in volume. Increasing competition from unstored fresh pears originating in Australia, New Zealand and South American countries during the first half of the year and appearing in increasing volume at the major export markets makes the sale of Pacific Coast fall and winter pears at prices satisfactory to the industry difficult after January. Except for Winter Nelis exports which begin in September and continue in volume until January, the major export season lasts from August until the end of November. September is the peak export month of the season for the d'Anjou, Beurre Bosc and Comice varieties. Exports of Hardy pears are heaviest during August and early September, and those of Winter Nelis are greatest during October and November.

Total Shipments by Major Varieties

Production of other than Bartlett pears as reported by the Bureau of Agricultural Economics on the average of the three-year period 1934 to 1936 amounted to 4,298,000 bushels. Reports of shippers to the General Crops Section covering the same period represent a total of 3,496,570 boxes of late pears shipped to domestic and foreign markets. Disregarding the slight variations between the net weight of a bushel of pears and that of a standard box, shippers' reports cover over 80 per cent of the estimated production. In view of the fact that not all of the pears are of a sufficiently high grade to be shipped into interstate commerce and that an appreciable volume of pears consumed in the producing states is not reported, it is believed that shippers' reports are sufficiently complete to draw final conclusions with regard to the interstate movement of late pears and their distribution on the average of the 1934-35 to 1936-37 seasons.

A summary of reports of shipments into domestic and export markets by individual seasons and on the average of the 1934-35 to 1936-37 seasons by districts is presented in table I. Of the total shipments 25 per cent originated in California, 43 per cent in Oregon and 32 per cent in Washington. Over half of the total shipments from California and Washington were sold in export markets, while most of the late pears shipped from Oregon were sold in domestic markets. Of the total Pacific Coast shipments of late pears on the average of the three seasons nearly 44 per cent were marketed in foreign countries.

Table I

Shipments of Pacific Coast Fall and Winter Pears by Major Regions

Seasons 1934-35 to 1936-37

	California	Medford District	Hood River District	Yakima District /1	Wenatchee District	Total Pacific Coast
	1	2	3	4	5	6
	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>
<u>1934-35 Season</u>						
Total	1,005,800	800,433	271,589	673,075	295,107	3,046,004
Domestic	548,322	571,535	188,520	237,362	217,281	1,763,020
Export	457,478	228,898	83,069	435,713	77,826	1,282,984
<u>1935-36 Season</u>						
Total	559,059	1,033,318	635,562	988,727	335,667	3,552,333
Domestic	220,318	821,660	373,315	313,541	243,604	1,972,438
Export	338,741	211,658	262,247	675,186	92,063	1,579,895
<u>1936-37 Season</u>						
Total	1,102,279	1,125,178	590,735	738,355	334,826	3,891,373
Domestic	392,378	817,073	402,300	355,070	195,048	2,161,869
Export	709,901	308,105	188,435	383,285	139,778	1,729,504
<u>Average 1934-35 to 1936-37 Seasons</u>						
Total	889,046	986,309	499,296	800,052	321,868	3,496,570
Domestic	387,006	736,756	321,379	301,991	218,645	1,965,776
Export	502,040	249,553	177,917	498,061	103,223	1,530,794
<u>Percentage of Pacific Coast, Average 1934-35 to 1936-37 Seasons</u>						
Total	25.4	28.2	14.3	22.9	9.2	100.0
Domestic	19.7	37.5	16.3	15.4	11.1	100.0
Export	32.8	16.3	11.6	32.5	6.8	100.0
<u>Percentage Exported by Major Regions, Av. 1934-35 to 1936-37 Seasons</u>						
	56.5	25.3	35.6	62.2	32.1	43.8

/1. Includes Underwood-White Salmon District.

Source of data: Shippers' Reports to the General Crops Section, Agric. Adjustment Administration.

Fall and winter pear shipments by major varieties during individual seasons and on the average of the three seasons are shown in table II. Shipments of d'Anjou pears are by far the largest, followed by Bosc and Winter Nelis pears, each of them amounting to almost 19 per cent of all shipments reported. Shipments of Hardy pears accounted for 8 per cent of the total and those of Comice pears for 5 per cent. With regard to the export shipments of the individual varieties it is indicated that 89 per cent of the Hardy pears, 73 per cent of the Winter Nelis, 62 per cent of the Comice, 45 per cent of the Anjou and 5 per cent of the Bosc pears grown on the Pacific Coast are sold in foreign markets.

The average shipments of late pears during the 1934-35 to 1936-37 seasons by district of origin are given in table III. While all Hardy pears are shown to originate in California, the major portion of the d'Anjou variety is shipped from Oregon and Washington. Over half of the Winter Nelis shipments originated in the Yakima District of Washington while the remaining shipments come from California and the Medford District in Oregon. Two-thirds of the Bosc pears were shipped from Oregon with the Medford District the most important source. Comice pears are shown to originate almost exclusively in California and the Medford District in Oregon. For all varieties of late pears combined the sources in order of their importance are: the Medford District in Oregon, the combined districts in California, the Yakima District in Washington, the Hood River District in Oregon and finally the Wenatchee District in Washington.

Table II

Shipments of Pacific Coast Fall and Winter Pears by Major Varieties

Seasons 1934-35 to 1936-37

Variety	Season			Average 1934-35 to 1936-37 Seasons	Per Cent of all Varieties 1934-1936 Average	Per Cent Exported 1934-1936 Average
	1934-35	1935-36	1936-37			
	1	2	3	4	5	6
	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>per cent</u>	<u>per cent</u>
Hardy	271,158	195,969	416,316	294,481	8.4	88.7
Bosc	523,907	568,023	858,840	650,257	18.6	5.0
Anjou	926,200	1,603,243	1,346,971	1,292,138	37.0	45.4
Winter Nelis	552,360	664,880	729,400	648,880	18.6	72.6
Comice	173,841	120,459	262,596	185,632	5.3	62.2
Other	185,549	147,327	267,250	200,042	5.7	22.7
Unknown	412,989	252,432	10,000	225,140	6.4	8.9
Total all Varieties	3,046,004	3,552,333	3,891,373	3,496,570	100.0	43.8

Source of data: Shippers' Report to the General Crops Section, Agric. Adjustment Administration.

Table III

Average Shipments of Pacific Coast Fall and Winter Pears
During the 1934-35 to 1936-37 Seasons
by Major Varieties and Regions

Variety	California	Medford District	Hood River District	Yakima District <u>/1</u>	Wenatchee District	Total Pacific Coast
	1	2	3	4	5	6
	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>
Hardy	294,465	--	--	16	--	294,481
Bosc	64,924	352,963	103,569	86,978	41,822	650,256
Anjou	38,583	402,559	365,006	285,932	200,060	1,292,138
Winter Nelis	158,311	113,764	5,130	366,223	5,452	648,880
Comice	95,467	85,271	2,785	825	1,283	185,631
All Others	237,296	31,752	22,806	60,078	73,251	425,183
Total All Varieties	889,046	986,309	499,296	800,052	321,868	3,496,570

Per Cent of Pacific Coast

Hardy	100.0	--	--	<u>/2</u>	--	100.0
Bosc	10.0	54.3	15.9	13.4	6.4	100.0
Anjou	3.0	31.2	28.2	22.1	15.5	100.0
Winter Nelis	24.4	17.5	.8	56.5	.8	100.0
Comice	51.4	45.9	1.5	.5	.7	100.0
All Others	55.8	7.5	5.4	14.1	17.2	100.0
Total All Varieties	25.4	28.2	14.3	22.9	9.2	100.0

- /1. Includes Underwood-White Salmon District.
/2. Less than 0.1 per cent.

Source of data: Shippers' Reports to the General Crops Section, Agric. Adjustment Administration.

Domestic Shipments and Major Markets

It has been indicated above that approximately 66 per cent. of all shipments of late pear varieties during the past three seasons were sold in domestic markets. The proportions of the major varieties marketed domestically during the 1934 to 1936 seasons are Beurre Bosc 95 per cent, d'Anjou 55 per cent, du Comice 38 per cent, Winter Nelis 27 per cent, and Beurre Hardy 11 per cent.

The total domestic shipments on the average of the 1934-35 to 1936-37 seasons amounted to 1,966,000 boxes of which over 88 per cent were shipped to a group of 18 states including the District of Columbia. As shown in table IV, over one-half of all domestic shipments were destined to the state of New York. Other important markets in this group from the viewpoint of total volume sold are in the states of Pennsylvania, Illinois, and Massachusetts.

A group of 17 central and southern states received only 5 per cent of all domestic shipments while reports of shipments to western states accounted for nearly 5 per cent of the total.

Relating shipments of late pears to the population in cities of 10,000 inhabitants and over, it is shown in table V that the Northeastern States received 42 boxes per 1,000 persons of urban population while shipments to Central and Southern States amounted to an average of 8.5 boxes per 1,000 of urban population. The state of New York with an average of over one hundred boxes per 1,000 of urban population is the largest domestic market for fall and winter pears. The average shipments for the country as a whole amounted to nearly 34 boxes per 1,000 persons living in cities of 10,000 inhabitants or over.

Table IV

Domestic Shipments of Pacific Coast Fall and Winter
Pears by States of Destination
Seasons 1934-35 to 1936-37

Destination	Season			Average 1934-35 to 1936-37 Seasons	Per Cent of Total Dom. Shipments Av. 1934-35 to 1936-37
	1934-35	1935-36	1936-37		
	1	2	3	4	5
	Boxes	boxes	boxes	boxes	per cent
Maine	2,160	720	1,490	1,457	.07
Vermont	1,440	--	--	480	.02
Massachusetts	115,308	133,184	115,851	121,448	6.18
Rhode Island	5,040	4,320	7,856	5,739	.29
Connecticut	22,938	37,440	32,522	30,967	1.57
New York	965,649	1,048,297	999,711	1,004,552	51.10
Pennsylvania	156,170	204,060	289,989	216,739	11.03
New Jersey	--	1,440	6,480	2,640	.13
Maryland	15,419	13,826	21,211	16,819	.86
Dist. of Columbia	22,600	28,753	28,040	26,464	1.35
Virginia	4,320	2,749	3,956	3,675	.18
West Virginia	1,801	1,070	2,810	1,894	.10
Ohio	17,892	28,872	52,977	33,247	1.69
Kentucky	4	--	1,880	628	.03
Indiana	720	--	--	240	.01
Illinois	175,457	174,677	247,390	199,174	10.13
Michigan	36,795	57,327	46,751	46,957	2.39
Wisconsin	20,921	21,642	34,566	25,709	1.31
Tot. N.E.States	1,564,634	1,758,377	1,893,480	1,738,830	88.50
North Carolina	3,600	2,319	5,891	3,937	.20
South Carolina	995	720	2,425	1,380	.07
Tennessee	9,188	5,580	6,469	7,079	.36
Georgia	2,928	3,880	6,534	4,447	.23
Alabama	1,680	5,158	8,004	4,947	.25
Florida	8,745	14,070	12,368	11,727	.60
Minnesota	6,806	4,666	22,793	11,422	.58
North Dakota	6	907	877	597	.03
South Dakota	--	25	--	8	/1
Iowa	1,440	1,540	3,625	2,202	.11
Nebraska	1,373	2,450	2,477	2,100	.11
Kansas	--	72	2,114	729	.04
Missouri	15,537	13,844	43,868	24,416	1.24
Arkansas	1,872	1,240	1,288	1,467	.07
Oklahoma	1,397	1,652	3,003	2,017	.10
Louisiana	4,320	7,600	8,800	6,907	.35
Texas	5,511	6,372	15,491	9,124	.46
Tot. Cen. & South.	65,398	72,095	146,027	94,506	4.80
Western States	99,235	87,760	91,918	92,971	4.70
Unknown	33,753	54,206	30,444	39,468	2.00
Tot. all Ship.	1,763,020	1,972,438	2,161,869	1,965,776	100.00

/1. Less than .01 per cent.

Source of data: Shippers' Reports to the General Crops Section, Agr. Adj. Adm.

Table V.
Domestic Shipments of Pacific Coast Fall and Winter Pears
to Specified States in Relation to Urban Population
Average 1934-35 to 1936-37 Seasons

State of Destination	Av. 1934-35 to 1936-37 Shipments	Pop. in Cities of 10,000 and Over (Urban Pop.)	Av. 1934-35 to 1936-37 Ship. per 1,000 of Urban Pop.
	1	2	3
	boxes	1,000 persons	boxes
New York	1,004,552	9,935	101.1
Dist. of Columbia	26,464	487	54.3
Pennsylvania	216,739	5,262	41.2
Illinois	199,174	4,969	40.1
Massachusetts	121,448	3,505	34.6
Connecticut	30,967	1,082	28.6
Wisconsin	25,709	1,283	20.0
Maryland	16,819	911	18.5
Michigan	46,957	2,934	16.0
Rhode Island	5,739	602	9.5
Vermont	480	53	9.1
Ohio	33,247	3,916	8.5
Maine	1,457	228	6.4
Virginia	3,675	637	5.8
West Virginia	1,894	344	5.5
Other States <u>/1</u>	3,508	5,236	.7
Northeastern States	1,738,830	41,384	42.0
Florida	11,727	559	21.0
Missouri	24,416	1,584	15.4
Minnesota	11,422	997	11.5
Louisiana	6,907	660	10.5
Tennessee	7,079	704	10.1
Alabama	4,947	580	8.5
North Dakota	597	73	8.2
Georgia	4,447	666	6.7
North Carolina	3,937	593	6.6
South Carolina	1,380	235	5.9
Nebraska	2,100	368	5.7
Texas	9,124	1,799	5.1
Other States <u>/1</u>	6,423	2,361	2.7
Cen. & South. States	94,506	11,179	8.5
Western and Unspecified States	132,439	5,764	23.0
Total Shipments Reported	1,965,776	58,327	33.7

/1. States receiving less than 5 boxes of winter pears per 1,000 of Urban Population.

Source of data: Col. 1, Shippers' Reports to the General Crops Section.
Col. 2, U. S. Dept. Commerce, 1935 Census.
Col. 3, Col. 1 divided by Col. 2.

Export Shipments and Major Markets

Nearly 44 per cent of all shipments of Pacific Coast fall and winter pears on the average of the three seasons 1934-35 to 1936-37 were sold in foreign countries. As shown in table VI, the total volume of export shipments amounted to 1,531,000 boxes. The European countries are the largest foreign outlet for late pear varieties, taking nearly 82 per cent of the total export volume. The British Isles and France are the most important markets, comparatively large quantities have also been shipped to Holland and Sweden. Of the export shipments destined to Asia only those to Palestine are of any significance while another country on the Mediterranean, namely, Egypt, is the largest receiver of late pears on the African continent. Of shipments to the Western Hemisphere, Brazil, Cuba and Canada receive the major volume in the order named.

A comparatively large volume of export shipments was reported for which the destination is unknown. This is due to the fact that many shippers without foreign connections, selling f.o.b. or f.a.s. to export brokers, know only the port of export but not the final destination of their shipment.

Table VI

Export Shipments of Pacific Coast Fall and Winter Pears
by Major Countries and Continents of Destination

Seasons 1934-35 to 1936-37

Destination	Season			Average 1934-35 to 1936-37 Seasons	Per cent of Total Export Shipments Av. 1934-35 to 1936-37
	1934-35	1935-36	1936-37		
	1 boxes	2 boxes	3 boxes	4 boxes	5 per cent
British Isles	623,517	715,896	764,538	701,317	45.8
France	287,658	325,642	290,625	301,309	19.7
Holland	64,824	123,984	124,772	104,526	6.8
Sweden	87,912	121,215	92,449	100,525	6.6
Other Europe	36,156	35,536	66,104	45,932	3.0
Europe	1,100,067	1,322,273	1,338,488	1,253,609	81.9
Palestine	23,319	17,120	26,103	22,181	1.5
Other Asia	5,738	9,978	8,674	8,130	.5
Asia	29,057	27,098	34,777	30,311	2.0
Egypt	27,584	36,899	38,021	34,168	2.2
Other Africa	--	560	3,170	1,243	.1
Africa	27,584	37,459	41,191	35,411	2.3
Brazil	10,160	44,522	20,480	25,480	1.7
Canada	4,556	20,817	18,275	14,550	.9
Cuba	11,003	18,515	18,080	15,866	1.0
Other Western Hemisphere	25,454	33,037	56,689	38,393	2.5
Western Hemisphere	51,173	116,891	113,524	93,863	6.1
U. S. Island Possessions	700	2,300	828	1,276	.1
Unknown	74,403	73,874	200,696	116,324	7.6
Total all Ex- port Shipments	1,282,984	1,579,895	1,729,504	1,530,794	100.0

Source of data: Shippers' Reports to the General Crops Section, Agric. Adjustment Administration

New York Auction Prices of Pacific Coast Fall and Winter Pears

New York auction sales of Pacific Coast fall and winter pears on the average of the 1934-35 to 1936-37 season amounted to 1,109,000 boxes. This volume sold in a single market is 26 per cent of the average crop for the same period, 32 per cent of the total shipments and 56 per cent of the domestic shipments as reported by Pacific Coast shippers for these three seasons.

The large volume of late pears sold at the New York auction make prices received in this market a fairly reliable indicator of the domestic price level. This is especially true for those varieties of which a large portion is normally sold in domestic markets rather than exported. Shipping records indicate that nearly all of the Beurre Bosc pears and over half of the d'Anjou pears were shipped to domestic markets while Comice and Winter Nelis pears are sold predominantly in export markets. New York auction prices of Beurre Hardy pears after allowing for marketing charges, cannot be considered to reflect prices received by growers for their Hardy crop accurately, even though they are representative of prices received for the small portion of the crop which is sold domestically.

Total sales and season weighted average prices of West Coast late pears at the New York auction for the period 1926 to 1937 are shown in table VII. The volume of sales of Pacific Coast late pears on the average of the 1933 to 1937 season was 18 per cent below the sales volume for the preceding five-year period. Prices received for all varieties of Pacific Coast fall and winter pears during the five seasons 1933 to 1937 averaged 19 per cent below prices received for the period 1928 to 1932. The reduction in prices of California late pears was 16 per cent, of Oregon pears 20 per cent, and of Washington pears 19 per cent over the same period.

The domestic price trend of the major varieties of late pears by states of origin for a period of years for which records are available are given in tables VIII, IX, and X.

Table VII

New York Auction Sales and Weighted Average Prices of Pacific Coast

Fall and Winter Pears by States of Origin, 1926-1937

Season	California			Oregon			Washington			Total Pacific Coast		
	Sales	Price	Sales	Sales	Price	Price	Sales	Price	Price	Sales	Price	Price
	1	2	3	4	5	6	7	8				
	boxes	dollars per box	boxes	dollars per box	boxes	dollars per box	boxes	dollars per box	boxes	dollars per box	boxes	dollars per box
1926	368,458	2.95	440,946	3.41	340,411	2.72	1,149,815	3.06				
1927	213,618	3.69	503,472	4.34	208,039	3.77	925,129	4.06				
1928	440,804	2.90	801,962	3.52	301,335	2.78	1,544,101	3.20				
1929	315,677	3.30	760,134	3.64	243,887	2.97	1,319,698	3.44				
1930	431,252	2.14	841,398	2.47	216,105	2.12	1,488,755	2.32				
1931	335,964	2.45	554,182	3.00	281,135	2.52	1,171,281	2.73				
1932	245,226	1.68	606,839	1.85	193,848	1.51	1,045,913	1.75				
1933	226,267	1.83	465,528	2.36	215,585	1.91	907,380	2.12				
1934	395,739	2.18	460,180	2.40	227,051	2.11	1,082,970	2.26				
1935	112,256	2.00	733,675	2.20	245,509	1.78	1,091,440	2.08				
1936	214,807	2.32	645,427	2.70	293,187	2.04	1,153,421	2.46				
1937 /1	112,780	2.07	757,870	1.95	282,646	1.75	1,153,296	1.91				
Av. 1926-1932	353,785	2.49	712,903	2.90	247,262	2.38	1,313,950	2.69				
Av. 1933-1937	212,370	2.08	612,536	2.32	252,795	1.92	1,077,701	2.17				

/1. Up to July 1.

Source of data: U. S. Dept. Agr., Bur. Agr. Econ., Division of Statistical and Historical Research.

Table VIII.

New York Auction Prices of Four Major Varieties of California Fall and Winter Pears

Seasons 1920-1936

Season	d'Anjou		Beurre Bosc		Winter Nelis		du Comice	
	Weighted Average Price	Index 1920-28 =100	Weighted Average Price	Index 1920-28 =100	Weighted Average Price	Index 1920-28 =100	Weighted Average Price	Index 1920-28 =100
	1	2	3	4	5	6	7	8
	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent
1920 /1	4.32/4	123	6.00 /2	143	4.52	127	4.13/3	116
1921	3.85	110	4.87	116	3.78	106	4.06	114
1922	2.85	81	4.09	97	2.96	83	2.96	83
1923	3.04	87	3.59	86	3.61	109	3.24	91
1924	3.94	113	4.44	106	4.28	127	4.07	115
1925	3.38	97	4.15	99	3.57	101	3.38	95
1926	3.05	87	3.31	79	2.97	84	2.94	83
1927	4.10	117	4.17	99	3.49	98	4.04	114
1928	3.01	86	3.17	76	2.80	79	3.16	89
Average 1920-28	3.50	100	4.20	100	3.55	100	3.55	100
1929	3.44	98	3.68	88	3.05	86	3.53	99
1930	2.38	68	2.38	57	2.11	59	2.37	67
1931	2.87	82	2.65	63	2.20	62	2.94	83
1932	1.72	49	1.71	41	1.48	41	1.75	49
1933	2.10	60	1.68	40	2.24	63	1.91	54
1934	2.51	72	2.07	49	2.13	60	2.40	68
1935	1.90	54	1.96	47	1.89	53	2.34	66
1936	2.41	69	2.15	51	2.44	69	2.30	65
1937	1.93	55	1.96	47	1.71	48	2.51	71

/1. Reports from Sept. 4 to Nov. 7, inc., not available.

/2. Only 130 boxes sold. /3. Only 115 boxes sold. /4. Only 460 boxes sold.

Source of data: New York Daily Fruit Reporter, 1920-21, Compiled by Economic Analysis Unit, General Crops Section, 1922-35, Compiled by S. W. Shear, Giannini Foundation, Univ. of Calif., 1936-37, Bur. Agr. Econ. Division of Statistical and Historical Research.

Table IX

New York Auction Prices of Four Major Varieties of Oregon Fall and Winter Pears.

Seasons 1922-1936

Season	d'Anjou		Beurre Bosc		Winter Nelis		du Comice	
	Weighted Average Price	Index 1922-28 =100	Weighted Average Price	Index 1922-28 =100	Weighted Average Price	Index 1922-28 =100	Weighted Average Price	Index 1922-28 =100
	1	2	3	4	5	6	7	8
	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent
1922	3.37	85	3.83	96	2.58	78	2.89	84
1923	3.48	88	4.17	105	3.14	95	2.99	87
1924	4.70	119	4.72	119	4.27	129	3.88	113
1925	4.01	102	4.23	107	3.69	111	3.75	109
1926	3.64	92	3.28	83	2.82	85	3.13	91
1927	4.64	117	4.29	108	3.58	108	4.09	119
1928	3.82	97	3.28	83	3.15	95	3.26	95
Av. 1922-1928	3.95	100	3.97	100	3.32	100	3.43	100
1929	3.73	94	3.58	900	2.69	81	3.55	103
1930	2.70	68	1.96	49	2.23	67	2.59	76
1931	3.22	82	2.94	74	2.05	62	2.92	85
1932	1.99	50	1.74	44	1.93	58	1.78	52
1933	2.75	70	1.94	49	2.48	75	2.41	70
1934	2.71	69	2.27	57	2.49	75	2.21	64
1935	2.20	56	2.33	59	1.92	58	2.06	60
1936	3.14	79	2.41	61	2.88	87	2.40	70
1937	2.02	51	1.92	48	1.88	56	1.99	58

Source of data: New York Daily Fruit Reporter, 1922-1935 compiled by S. W. Shear, Giannini Foundation,
Univ. of California; 1936, Economic Analysis Unit, General Crops Section.

Table X.

New York Auction Prices of Four Major Varieties of Washington Fall and Winter Pears

1926-1936

Season	d'Anjou		Beurre Bosc		Winter Nelis		du Comice	
	Weighted Average Price	Index 1926-29 =100	Weighted Average Price	Index 1926-29 =100	Weighted Average Price	Index 1926-29 =100	Weighted Average Price	Index 1926-29 =100
	1	2	3	4	5	6	7	8
	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent
1926	3.76	98	3.22	94	2.24	93	2.56	85
1927	4.64	121	4.25	124	3.01	125	3.47	116
1928	3.33	87	3.18	93	2.26	94	2.69	89
1929	3.56	93	3.04	89	2.08	87	3.26	109
Av. 1926-1929	3.82	100	3.42	100	2.40	100	3.00	100
1930	2.48	65	1.73	51	1.66	69	1.87	62
1931	3.05	80	2.44	71	1.78	74	2.36	79
1932	1.75	46	1.34	39	1.10	46	1.08	36
1933	2.14	56	1.60	47	1.49	62	1.54	51
1934	2.33	61	1.84	54	1.55	65	1.56	52
1935	1.90	50	1.66	49	1.30	54	1.36	45
1936	2.34	61	1.91	56	1.53	64	1.54	51
1937	1.85	48	1.43	42	1.33	55	1.78	50

Source of data: U. S. Dept. Agr., Bur. Agr. Econ., Div. of Statistical and Historical Research.

After a slight recovery of prices during the 1936 season a great price drop occurred during the 1937 season which affected all varieties but particularly those marketed late in the season. Season average prices in 1937 for most varieties were only ~~one~~ half of the average price received prior to the 1928 season.

Net Returns to Growers

During the 1937 season an attempt was made to obtain data with regard to the returns to growers from sales of the major varieties and grades of fall and winter pears. Shippers, particularly those who pool their returns to growers, reported the volume of the fruit packed and the prices paid to growers. Thus, the return to growers represents the net return after all expenses except those incurred by the grower have been paid; in other words, it is the return for bare fruit delivered to the packing house on a packed box basis.

While representative samples of returns to growers were obtained in most districts for the seasons 1929 to 1936 only few shippers still possessed their records for seasons prior to 1929. The sample for earlier years, therefore, is not believed to be sufficiently large to permit a presentation of returns to growers by grades. Table ~~Xi~~ gives the volume of fruit and the corresponding weighted average prices received by growers for all grades of d'Anjou, Beurre Bosc, and Winter Nelis pears grown in the Medford District of Oregon during the years 1919 to 1936. Returns to growers for these major varieties prior to the 1929 season averaged around \$2.00 or over. Beginning with the 1930 season, growers witnessed a drastic reduction in their income reaching the lowest point in 1932. Returns since then have fluctuated somewhat but never returned to the level of prices prior to 1929. Prices of d'Anjou pears which for the years prior to 1929 averaged below prices of Beurre Bosc pears have not dropped as low as those of Beurre Bosc pears. Returns from Medford Winter

Table XI

Net Returns to Growers/1 for d'Anjou, Beurre Bosc and Winter

Nelis Pears Grown in the Medford District of Oregon

1919 to 1936 Season

Crop Year	d'Anjou		Beurre Bosc		Winter Nelis	
	: Wtd. Av.:		: Wtd. Av.:		: Wtd. Av.	
	Boxes	Price	Boxes	Price	Boxes	Price
	: All Grades		: All Grades:		: All Grades	
	1	2	3	4	5	6
	number	dollars per box	number	dollars per box	number	dollars per box
1919	2,383	1.887	1,678	2.960	1,068	1.623
1920	616	1.116	1,394	2.408	529	.466
1921	1,369	.730	2,008	1.090	671	.499
1922	--	1.93/2	--	2.17/2	--	1.28/2
1923	8,668	2.112	5,403	2.780	10,057	1.985
1924	12,720	2.938	15,526	2.803	10,370	2.447
1925	21,393	2.101	11,334	2.401	10,191	2.163
1926	22,689	1.464	28,982	1.327	9,741	1.941
1927	28,542	2.591	18,459	2.558	18,061	2.443
1928	158,704	1.654	152,705	1.326	54,903	1.057
1929	112,033	2.206	104,184	1.716	47,988	.730
1930	136,987	.787	114,662	.017	56,975	.262
1931	73,336	1.456	79,752	1.062	28,695	.335
1932	148,843	.454	114,780	-.034	47,429	.149
1933	176,487	1.101	143,692	.311	39,841	.753
1934	228,986	1.132	248,923	.548	67,203	.697
1935	366,341	.576	284,645	.640	92,345	.240
1936	291,661	1.225	356,076	.721	123,991	.988

1. Net returns to growers for bare fruit delivered to the packing house on a packed box basis.

2. No shippers' records available, price quoted from W. W. McLaughlin and W. A. Hutchins "Talent Irrigation District Oregon" March, 1932.

Source of data: Compiled from records of major shippers and packers by Economic Analysis Unit, General Crops Section, during the 1937 season.

Nelis averaged below the returns from d'Anjou and Beurre Bosc pears except during the period 1934 to 1936 when they were slightly above returns from sales of Bosc pears.

In the state of Washington net returns to growers have generally been lower than those in the Medford District of Oregon. Table XII presents the volume and net returns for d'Anjou, Beurre Bosc, and Winter Nelis grown in the State of Washington. The trend in returns from season to season is about the same as shown for Medford pears. Returns for the individual varieties during the three-year period 1934-1936, however, are from \$.20 to \$.40 below returns to growers in the Medford District.

Similar information as given here for Medford and Washington winter pears is not as yet available for other pear producing districts of the Pacific Coast.

During the 1937-38 season, returns even for the best grades of winter pears have been disappointing to growers. Net returns as calculated from New York auction sales of d'Anjou, Beurre Bosc, and Winter Nelis are presented in Table XIII by state of origin and grade of major variety sold. Because of a major price drop which occurred in domestic markets during the month of December, the returns to growers for the past season have been greatly influenced by the time of sale of the various varieties and grades. Oregon d'Anjou pears of the Extra Fancy grade on the average netted the grower \$.53 per box while the same grade from Washington returned \$.38 per box to the grower out of which the cost of production and harvesting had to be paid. Sales of Oregon

Table XII

Net Returns to Growers/1 for d'Anjou, Beurre Bosc and
Winter Nelis Pears Grown in the State of Washington
1919 to 1936 Season

Crop Year	d'Anjou		Beurre Bosc		Winter Nelis	
	:	Wtd. Av.	:	Wtd. Av.	:	Wtd. Av.
	Boxes	Price	Boxes	Price	Boxes	Price
	:	All Grades	:	All Grades	:	All Grades
	1	2	3	4	5	6
	number	dollars per box	number	dollars per box	number	dollars per box
1919	10,768	2.571	286	3.244	23,410	1.759
1920	11,666	2.170	792	2.116	24,812	.696
1921	11,866	1.991	486	1.753	24,250	1.051
1922	9,742	1.397	488	1.678	27,635	.647
1923	26,120	1.351	718	1.747	42,185	.900
1924	15,112	2.293	1,221	2.752	14,181	1.609
1925	22,647	2.088	1,127	2,196	21,864	.645
1926	51,772	1.347	3,927	1.331	71,627	.584
1927	23,860	2.507	1,886	2.561	40,244	1.229
1928	72,840	1.650	8,160	1.512	121,875	.490
1929	65,734	2.076	4,899	1.670	80,260	.855
1930	107,082	.990	15,332	.407	130,749	.317
1931	86,982	1.023	16,152	.694	91,389	.375
1932	114,682	.699	16,105	-.022	62,989	.065
1933	191,922	.699	14,540	.193	72,698	-.407
1934	248,780	.859	53,549	.372	140,936	.197
1935	329,978	.642	38,844	.347	194,065	.254
1936	235,383	.808	54,430	.497	137,703	.289

1. Net returns to growers for bare fruit delivered to the packing house on a packed box basis.

Source of data: Compiled from records of major shippers and packers by Economic Analysis Unit, General Crops Section, during the 1937 Season.

Table XIII

Season's Average Net Returns/1 from New York Auction Sales of Oregon
and Washington Beurre Bosc and d'Anjou Pears by Grades

1937-38 Season

Grades	:	:	Net Returns		:	Percentage by Grades	
	:	Number of	:	:	:	Number of	:
	:	Boxes Sold	:	Total	:	Per Box	:
			1	2	3	4	5
				dollars	dollars	percent	percent
Oregon d'Anjou							
Extra Fancy	146,505		77,647.65		.53	42.0	60.8
Fancy	147,456		56,033.28		.38	42.2	43.9
Unclassified	55,026	-	6,052.86		-.11	15.8	- 4.7
All Grades	348,987		127,628.07		.37	100.0	100.0
Washington d'Anjou							
Extra Fancy	103,316		39,260.08		.38	46.9	65.0
Fancy	36,952		10,716.08		.29	16.8	17.7
Unclassified	80,134		10,417.42		.13	36.3	17.3
All Grades	220,402		60,393.58		.28	100.0	100.0
Oregon and Washington d'Anjou							
Extra Fancy	249,821		117,415.87		.47	43.9	61.9
Fancy	184,408		68,230.96		.37	32.4	36.0
Unclassified	135,160		4,054.80		.03	23.7	2.1
All Grades	569,389		189,701.63		.33	100.0	100.0
Oregon Beurre Bosc							
U. S. I	214,882		85,952.80		.40	75.3	92.1
Extra Fancy	29,858		6,270.18		.21	10.5	6.7
Fancy	30,359		2,125.13		.07	10.6	2.3
U. S. II	2,448	-	367.20		-.15	.9	- .4
Unclassified	7,690	-	692.10		-.09	2.7	- .7
All Grades	285,237		93,288.81		.33	100.0	100.0
Washington Beurre Bosc							
Extra Fancy	13,754	-	1,237.86		-.09	54.6	-38.9
Fancy	6,865	-	1,441.65		-.21	27.3	-45.4
Unclassified	4,545	-	499.95		-.11	18.1	-15.7
All Grades	25,164	-	3,179.46		-.13	100.0	-100.0

1. Net Returns in this computation means the returns to growers for bare fruit delivered to the packing house on a packed box basis.

(Continued)

Table XIII

Season's Average Net Returns/1 from New York Auction Sales of Oregon
and Washington Beurre Bosc and d'Anjou Pears by Grades

1937-38 Season
(Continued)

Grades	Number of Boxes Sold:	Net Returns		Percentage by Grades	
		Total	Per Box	Number of Boxes Sold	Net Return
		1	2	3	4
		dollars	dollars	percent	percent
Oregon and Washington Beurre Bosc					
U. S. I	214,882	85,952.80	.40	69.2	94.7
Extra Fancy	43,612	5,233.44	.12	14.1	5.8
Fancy	37,224	1,116.72	.03	12.0	1.2
U. S. II	2,448	- 367.20	-.15	.8	-.4
Unclassified	12,235	-1,223.50	-.10	3.9	-1.3
All Grades	310,401	90,712.26	.29	100.0	100.0
Oregon Winter Nelis					
Extra Fancy	27,813	8,343.90	.30	30.8	54.2
Fancy	49,890	6,485.70	.13	55.2	42.2
U. S. I	10,863	1,520.82	.14	12.0	10.0
U. S. II	385	- 284.90	-.74	.4	- 1.9
Unclassified	1,431	- 686.88	-.48	1.6	- 4.5
All Grades	90,382	15,378.64	.16	100.0	100.0
Washington Winter Nelis					
Extra Fancy	6,541	-1,831.48	-.28	66.9	-67.5
Fancy	3,213	- 867.51	-.27	32.9	-32.0
Unclassified	24	- 14.16	-.59	.2	-.5
All Grades	9,778	-2,713.15	-.28	100.0	-100.0
Oregon and Washington Winter Nelis					
Extra Fancy	34,354	6,193.72	.18	34.3	51.4
Fancy	53,103	5,310.30	.10	53.0	44.1
U. S. I	10,863	1,520.82	.14	10.8	12.7
U. S. II	385	- 284.90	-.74	.4	- 2.4
Unclassified	1,455	- 698.40	-.48	1.5	- 5.8
All Grades	100,160	12,031.54	.12	100.0	100.0

/1. Net Returns in this computation means the returns to growers for bare fruit delivered to the packing house on a packed box basis.

and Washington unclassified d'Anjou pears amounted to 24 percent of the volume while the net return from them contributed only 2 percent of the total net return. Oregon Bosc pears returned \$.33 per box on the average of all grades while the small volume of Washington Bosc sold at an average loss of \$.13 per box. Oregon Winter Nelis returned \$.16 per box to the grower while the small sales of Washington Winter Nelis sold at the New York auction market resulted in a loss to the grower. Washington Winter Nelis which exceed those grown in Oregon in volume of production are almost all sold in foreign markets.

The calculations of net returns to growers from New York auction sales of Oregon and Washington d'Anjou, Beurre Bosc and Winter Nelis pears shows that during the 1937-38 season the sales of all pears below the Fancy grade resulted in losses to growers. Except for returns from sales of Fancy d'Anjou pears, prices received for the Fancy grade of Beurre Bosc and Winter Nelis pears on the average were not sufficient to cover costs of harvesting and hauling to the packing house. Only in exceptional cases were the returns to growers during the 1937-38 season for the best grades large enough to cover all costs of production, harvesting and marketing.

Analyzing further the returns to growers from New York auction sales by grades and size groups it is shown in Tables XIV, XV, and XVI that for the d'Anjou and Beurre Bosc varieties sizes 120 to 180 received higher prices than sizes 110 and larger and those smaller than 180.

Lowest returns were obtained from sales of sizes smaller than 180. For the Winter Nelis variety returns were generally highest for sizes 110 and larger and declined as the sizes became smaller.

Table XIV

Season's Average Net Return to Growers/1 from New York Auction

Sales of Oregon and Washington d'Anjou Pears, by Grades

and Size Groups, 1937-38 Season

Grades and Size Group	Sales Number of Boxes	Percentage			Weighted Average Price per Box	Average : Marketing: Charges : 2/	Av.Net Re- turn/1 for Fruit Deliv. to Packing House
		Size	All Size	Groups			
		by Grades	and Grades	Groups			
	1	2	3	4	5	6	
	number	- - percent - -	- - - -	dollars - - - -			

OREGON d'ANJOU PEARS

Extra Fancy

110 and larger	69,758	47.6	20.0	2.06	1.66	.40
120 to 180	73,089	49.9	20.9	2.36	1.68	.68
Smaller than 180	3,658	2.5	1.1	1.98	1.66	.32
All Sizes	146,505	100.0	42.0	2.20	1.67	.53

Fancy

110 and larger	60,810	41.2	17.4	1.90	1.66	.24
120 to 180	80,355	54.5	23.0	2.17	1.68	.49
Smaller than 180	6,291	4.3	1.8	1.82	1.66	.16
All Sizes	147,456	100.0	42.2	2.05	1.67	.58

Unclassified

110 and larger	26,568	48.3	7.6	1.41	1.56	-.15
120 to 180	27,053	49.2	7.8	1.50	1.57	-.07
Smaller than 180	1,405	2.5	.4	1.02	1.53	-.51
All Sizes	55,026	100.0	15.8	1.45	1.56	-.11

All Grades

110 and larger	157,136	45.0	45.0	1.88	1.64	.24
120 to 180	180,497	51.7	51.7	2.15	1.66	.49
Smaller than 180	11,354	3.3	3.3	1.78	1.63	.15
All Sizes	348,987	100.0	100.0	2.02	1.65	.37

WASHINGTON d'ANJOU PEARS

Extra Fancy

110 and larger	61,540	59.6	27.9	1.94	1.60	.34
120 to 180	40,175	38.9	18.2	2.05	1.60	.45
Smaller than 180	1,601	1.5	.7	1.80	1.59	.21
All Sizes	103,316	100.0	46.8	1.98	1.60	.38

Fancy

110 and larger	21,502	58.2	9.8	1.62	1.58	.24
120 to 180	14,343	38.8	6.5	1.94	1.59	.35
Smaller than 180	1,107	3.0	.5	1.70	1.57	.13
All Sizes	36,952	100.0	16.8	1.87	1.58	.29

(Continued)

TABLE XIV
Season's Average Net Return to Growers/1 from New York Auction
Sales of Oregon and Washington d'Anjou Pears, by Grades
and Size Groups, 1937-38 Season

Grade and Size Group	Sales Number of Boxes	Percentage		Weighted: Average Price per Box	Average Marketing Charges 2/ dollars	Av. Net Re- turn/1 for Fruit Deliv. to Packing House
		Size Groups by	All Size Groups and			
		Grades	Grades			
	1	2	3	4	5	6
	Number	- - percent - -		- - - -	dollars - - - -	
<u>Unclassified</u>						
110 and larger	40,158	50.1	18.2	1.67	1.54	.13
120 to 180	38,734	48.3	17.6	1.70	1.54	.16
Smaller than 180	1,242	1.6	.6	1.34	1.51	-.17
All Sizes	80,134	100.0	36.4	1.67	1.54	.13
<u>All Grades</u>						
110 and larger	123,200	55.9	55.9	1.83	1.57	.26
120 to 180	93,252	42.3	42.3	1.89	1.57	.32
Smaller than 180	3,950	1.8	1.8	1.63	1.55	.08
All Sizes	220,402	100.0	100.0	1.85	1.57	.28
<u>OREGON AND WASHINGTON d'ANJOU PEARS</u>						
<u>Extra Fancy</u>						
110 and larger	131,298	52.6	23.1	2.00	1.65	.37
120 to 180	113,264	45.3	19.9	2.25	1.65	.60
Smaller than 180	5,259	2.1	.9	1.93	1.63	.30
All Sizes	249,821	100.0	43.9	2.11	1.64	.47
<u>Fancy</u>						
110 and larger	82,312	44.6	14.5	1.88	1.63	.25
120 to 180	94,698	51.4	16.6	2.14	1.65	.49
Smaller than 180	7,398	4.0	1.3	1.80	1.63	.17
All Sizes	184,408	100.0	32.4	2.01	1.64	.37
<u>Unclassified</u>						
110 and larger	66,726	49.4	11.7	1.57	1.55	.02
120 to 180	65,787	48.6	11.5	1.62	1.55	.07
Smaller than 180	2,647	2.0	.5	1.17	1.52	-.35
All Sizes	135,160	100.0	23.7	1.58	1.55	.03
<u>All Grades</u>						
110 and larger	280,336	49.3	49.3	1.86	1.61	.25
120 to 180	273,749	48.0	48.0	2.06	1.62	.44
Smaller than 180	15,304	2.7	2.7	1.74	1.60	.14
All Sizes	569,389	100.0	100.0	1.95	1.62	.33

1. "Net Returns to Growers" in this computation means the returns for bare fruit delivered to the packing house.
2. The average marketing costs for the season are computed from the weekly marketing charges. For d'Anjou pears these consist of freight, refrigeration packing (incl. Box), loading and warehousing, storage, and terminal auction charges. All charges except storage and auction charges are assumed to be the same throughout the season, irrespective of time and volume of sale or grade of pears. Freight charges amount to \$.715 per box, refrigeration (Rule 247) \$.09 per box, packing \$.50 per box, loading and warehousing \$.05 per box, or a total of fixed charges of \$1.365 per box. Storage charges are approximately 20 cents for the season. They are assumed to begin on Oct. 25 and increase by one cent per week until March 12 when the full 20 cents is charged for the remainder of the season. Auction charges are calculated at 7 percent of the weekly average gross receipt per box.

Table XV

Season's Average Net Returns to Growers /1 from New York Auction

Sales of Oregon and Washington Beurre Bosc Pears,

by Grades and Size Groups, 1937-38 Season

		Percentage		Weighted		Av. Net Retu
Grade and Size:	Sales	Size	All Size	Average	Average	for Fruit De-
Group	Number	Groups by	Groups	Price	Marketing	livered to
	of Boxes:	Grades	and Grades:	per Box	Costs/2	Pack. House
	1	2	3	4	5	6
	<u>number</u>	<u>per cent</u>		<u>dollars</u>		
<u>OREGON BEURRE BOSC PEARS</u>						
<u>U. S. No. 1</u>						
110 and larger	41,397	19.3	14.5	1.94	1.59	.35
120 to 180	160,128	74.5	56.2	2.02	1.59	.43
Smaller then 180	13,357	6.2	4.7	1.83	1.58	.25
All Sizes	214,882	100.0	75.4	1.99	1.59	.40
<u>Extra Fancy</u>						
110 and larger	8,394	28.1	3.0	1.89	1.61	.28
120 to 180	20,661	69.2	7.2	1.78	1.60	.18
Smaller than 180	803	2.7	.3	1.71	1.60	.11
All Sizes	29,858	100.0	10.5	1.82	1.61	.21
<u>Fancy</u>						
110 and larger	6,485	21.4	2.3	1.74	1.60	.14
120 to 180	20,622	67.9	7.2	1.66	1.60	.06
Smaller than 180	3,252	10.7	1.1	1.62	1.59	.03
All Sizes	30,359	100.0	10.6	1.67	1.60	.07
<u>U. S. No. 2</u>						
100 and larger	353	14.4	.1	1.37	1.62	-.25
120 to 180	1,650	67.4	.6	1.52	1.63	-.11
Smaller than 180	445	18.2	.1	1.36	1.62	-.26
All Sizes	2,448	100.0	.8	1.47	1.62	-.15
<u>Unclassified</u>						
110 and larger	2,004	26.1	.7	1.38	1.52	-.14
120 to 180	5,537	72.0	1.9	1.44	1.52	-.08
Smaller than 180	149	1.9	.1	1.35	1.51	-.16
All Sizes	7,690	100.0	2.7	1.43	1.52	-.09

(Continued)

Table XV (continued)

Season's Average Net Returns to Growers / 1 from New York Auction

Sales of Oregon and Washington Beurre Bosc Pears,

by Grades and Size Groups, 1937-38 Season

Grade and Size Group	Sales : Number of Boxes	Percentage		:Weighted : Average : Price : per Box	:Average : Marketing : Costs/2	:Av. Net Return :for Fruit de- livered to :Pack. House
		Size : Groups by: Grades	All Sizes : Groups : and Grades			
	1 number	2 -- per cent --	3 --	4 -- -- dollars -- --	5 --	6 --
<u>OREGON BEURRE BOSCH PEARS (CONT'D)</u>						
<u>All Grades</u>						
110 and larger	58,633	20.6	20.6	1.88	1.59	.29
120 to 180	208,598	73.1	73.1	1.94	1.60	.34
Smaller than 180	18,006	6.3	6.3	1.77	1.58	.19
All Sizes	285,237	100.0	100.0	1.92	1.59	.33
<u>WASHINGTON BEURRE BOSCH PEARS</u>						
<u>Extra Fancy</u>						
110 and larger	7,362	53.5	29.2	1.43	1.56	-.13
120 to 180	6,285	45.7	25.0	1.53	1.57	-.04
Smaller than 180	107	.8	.4	1.40	1.56	-.16
All Sizes	13,754	100.0	54.6	1.47	1.56	-.09
<u>Fancy</u>						
110 and larger	3,691	53.7	14.7	1.36	1.57	-.21
120 to 180	3,087	45.0	12.3	1.37	1.57	-.20
Smaller than 180	87	1.3	.3	1.35	1.56	-.21
All Sizes	6,865	100.0	27.3	1.36	1.57	-.21
<u>Unclassified</u>						
110 and larger	2,060	45.3	8.2	1.38	1.52	-.14
120 to 180	2,464	54.2	9.8	1.43	1.52	-.09
Smaller than 180	21	.5	.1	1.26	1.35	-.09
All Sizes	4,545	100.0	18.1	1.41	1.52	-.11
<u>All Grades</u>						
110 and larger	13,113	52.1	52.1	1.40	1.56	-.16
120 to 180	11,836	47.0	47.0	1.47	1.56	-.09
Smaller than 180	215	.9	.9	1.36	1.56	-.20
All Sizes	25,164	100.0	100.0	1.43	1.56	-.13

(Continued)

Table XV (continued)

Season's Average Net Returns to Growers/1 from New York Auction

Sales of Oregon and Washington Beurre Bosc Pears,

by Grades and Size Groups, 1937-38 Season

Grade and Size Group		Sales	Size	Percentage	All Sizes	Weighted Average	Average	Av. Net Return for Fruit Delivered to Pack. House
		Number	Groups by	Grades	Grades	Price	Marketing Costs/2	
		of Boxes				per Box		
		1	2	3	4	5	6	
		number	per cent		dollars			
OREGON AND WASHINGTON BEURRE BOSCH PEARS								
U. S. No. 1								
110 and larger	41,397	19.3	13.3	1.94	1.59	.35		
120 to 180	160,128	74.5	51.6	2.02	1.59	.43		
Smaller than 180	13,357	6.2	4.3	1.83	1.58	.25		
All Sizes	214,882	100.0	69.2	1.99	1.59	.40		
Extra Fancy								
110 and larger	15,756	36.1	5.1	1.68	1.59	.09		
120 to 180	26,946	61.8	8.7	1.72	1.59	.13		
Smaller than 180	910	2.1	.3	1.67	1.59	.08		
All Sizes	43,612	100.0	14.1	1.71	1.59	.12		
Fancy								
110 and larger	10,176	27.3	3.3	1.60	1.59	.01		
120 to 180	23,709	63.7	7.6	1.62	1.59	.03		
Smaller than 180	3,339	9.0	1.1	1.61	1.59	.02		
All Sizes	37,224	100.0	12.0	1.62	1.59	.03		
U. S. No. 2								
110 and larger	353	14.4	.1	1.37	1.62	-.25		
120 to 180	1,650	67.4	.5	1.52	1.63	-.11		
Smaller than 180	445	18.2	.2	1.36	1.62	-.26		
All Sizes	2,448	100.0	.8	1.47	1.62	-.15		
Unclassified								
110 and larger	4,064	33.2	1.3	1.38	1.52	-.14		
120 to 180	8,001	65.4	2.6	1.44	1.52	-.08		
Smaller than 180	170	1.4	.0	1.34	1.51	-.17		
All Sizes	12,235	100.0	3.9	1.42	1.52	-.10		
All Grades								
110 and larger	71,746	23.1	23.1	1.79	1.59	.20		
120 to 180	220,434	71.0	71.0	1.91	1.59	.32		
Smaller than 180	18,221	5.9	5.9	1.77	1.58	.19		
All Sizes	310,401	100.0	100.0	1.88	1.59	.29		

(Continued)

Table XV (continued)

Season's Average Net Returns to Growers/1 from New York Auction

Sales of Oregon and Washington Beurre Bosc Pears,

by Grades and Size Groups, 1937-38 Season

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1. "Net Returns to Growers" in this computation means the returns for bare fruit delivered to the packing house.
 2. The Average Marketing Charges for the season are computed from the weekly marketing charges. For Beurre Bosc pears these consist of freight, refrigeration, packing (incl. box), loading and warehousing, ripening, storage and terminal auction charges. All charges except storage and auction charges are assumed to be the same throughout the season, irrespective of time and volume of sale or grade of pears. Freight charges amount to \$.715 per box, refrigeration (Rule 247) \$.09 per box, packing \$.50 per box, loading and warehousing \$.05 per box, ripening \$.03 per box, or a total of fixed charges of \$1.385 per box. Storage charges are approximately 20 cents for the season. They are assumed to begin on Oct. 25 and increase by one cent per week until March 12 when the full 20 cents are charged for the remainder of the season. Auction charges are calculated at 7 per cent of the weekly average gross receipt per box.

Table XVI

Season's Average Net Returns to Growers/1 from New York Auction

Sales of Oregon and Washington Winter Nelis Pears,

by Grades and Size Groups, 1937-38 Season

Grade and Size Group	:	:	Percentage		:Weighted	: Average	: Av. Net Re-
	: Sales	: Size	: All Size	: Average	:Marketing:	turn/1 for	
	:Number	:Groups by	: Groups	: Price	: Charges	: Fruit Del. To	
	:of Boxes	:Grades	: and Grades:	per Box :	/2	: Pack.House	
	1	2	3	4	5	6	
	- number -	- - - per cent - -			- - - dollars - - -		
OREGON WINTER NELIS PEARS							
<u>Extra Fancy</u>							
110 and larger	1,265	4.5	1.4	2.25	1.70		.55
120 to 180	16,291	58.6	18.0	2.17	1.69		.48
193	4,709	16.9	5.2	1.75	1.66		.09
Smaller than 195	5,548	20.0	6.2	1.54	1.65	-	.11
All Sizes	27,813	100.0	30.8	1.98	1.68		.30
<u>Fancy/3</u>							
110 and larger	2,009	4.0	2.3	2.10	1.70		.40
120 to 180	31,272	62.7	34.5	1.95	1.69		.26
193	7,105	14.2	7.9	1.62	1.66	-	.04
Smaller than 195	9,504	19.1	10.5	1.43	1.65	-	.22
All Sizes	49,890	100.0	55.2	1.81	1.68		.13
<u>U. S. No. 1</u>							
110 and larger	131	1.2	.1	2.22	1.70		.52
120 to 180	6,876	63.3	7.6	2.00	1.69		.31
193	1,532	14.1	1.7	1.66	1.67	-	.01
Smaller than 195	2,324	21.4	2.6	1.37	1.65	-	.28
All Sizes	10,863	100.0	12.0	1.82	1.68		.14
<u>U. S. No. 2</u>							
110 and larger	--	--	--	--	--		--
120 to 180	159	41.2	.2	1.03	1.63	-	.60
193	83	21.6	.1	1.00	1.63	-	.63
Smaller than 195	143	37.2	.1	.66	1.61	-	.95
All Sizes	385	100.0	.4	.88	1.62	-	.74
<u>Unclassified</u>							
110 and larger	133	9.3	.1	1.29	1.64	-	.35
120 to 180	1,120	78.3	1.3	1.16	1.63	-	.47
193	111	7.7	.1	.93	1.62	-	.69
Smaller than 195	67	4.7	.1	1.21	1.63	-	.42
All Sizes	1,431	100.0	1.6	1.15	1.63	-	.48

(continued)

Table XVI (continued)

Season's Average Net Returns to Growers/1 from New York Auction

Sales of Oregon and Washington Winter Nelis Pears,

by Grades and Size Groups, 1937-38 Season

Grade and Size Group	Percentage			Weighted: Average		Av. Net Re- turn/1 for Fruit Del. to Pack. House
	:Sales	:Size	:All Size	:Average	:Marketing:Charges	
	:Number	:Groups by:	:Groups	:Price	: /2	
	:of Boxes:	:Grades	:and Grades:	:per Box	:	
	1	2	3	4	5	6
	- number -	- - -	per cent - -	- - -	dollars - - -	

OREGON WINTER NELIS PEARS (CONT'D)

All Grades

110 and larger	3,538	3.9	3.9	2.13	1.70	.43
120 to 180	55,718	61.6	61.6	2.00	1.70	.30
193	13,540	15.0	15.0	1.66	1.68	.02
Smaller than 195	17,586	19.5	19.5	1.45	1.66	.21
All Sizes	90,382	100.0	100.0	1.85	1.69	.16

WASHINGTON WINTER NELIS PEARS

Extra Fancy

110 and larger	1,641	25.1	16.8	1.29	1.60	.31
120 to 180	3,586	54.8	36.7	1.49	1.61	.12
193	665	10.2	6.8	1.03	1.58	.55
Smaller than 195	649	9.9	6.6	.74	1.56	.82
All Sizes	6,541	100.0	66.9	1.32	1.60	.28

Fancy

110 and larger	407	12.7	4.2	1.19	1.61	.42
120 to 180	2,657	82.7	27.2	1.42	1.63	.21
193	66	2.0	.7	.81	1.59	.78
Smaller than 195	83	2.6	.8	.73	1.58	.85
All Sizes	3,213	100.0	32.9	1.36	1.63	.27

Unclassified

110 and larger	--	--	--	--	--	--
120 to 180	14	58.3	.1	.90	1.49	.59
193	4	16.7	.0	.90	1.49	.59
Smaller than 195	6	25.0	.1	.90	1.49	.59
All Sizes	24	100.0	.2	.90	1.49	.59

All Grades

110 and larger	2,048	21.0	21.0	1.27	1.61	.34
120 to 180	6,257	64.0	64.0	1.46	1.62	.16
193	735	7.5	7.5	1.01	1.59	.58
Smaller than 195	738	7.5	7.5	.74	1.57	.83
All Sizes	9,778	100.0	100.0	1.33	1.61	.28

WASHINGTON AND OREGON WINTER NELIS PEARS

Extra Fancy

110 and larger	2,906	8.5	2.9	1.71	1.66	.05
120 to 180	19,877	57.9	19.8	2.05	1.68	.37

Table XVI (continued)

Season's Average Net Returns to Growers/1 from New York Auction

Sales of Oregon and Washington Winter Nelis Pears,

by Grades and Size Groups, 1937-38 Season

Grade and Size Group	Sales : Number : of Boxes	Percentage		Weighted : Average : Price : per Box	Average : Marketing : Charges : /2	Av. Net Re- turn/1 for Fruit Del. to Pack. House
		Size : Groups by : Grades	All Size : Groups : and Grades			
	1	2	3	4	5	6
	- number -	- - per cent - -	- - - -	- - - -	dollars - - -	
WASHINGTON AND OREGON WINTER NELIS PEARS (CONT'D.)						
Extra Fancy (cont'd.)						
193	5,374	15.6	5.4	1.66	1.66	.00
Smaller than 195	6,197	18.0	6.2	1.46	1.64	-.18
All Sizes	34,354	100.0	34.3	1.85	1.67	.18
Fancy/3						
110 and larger	2,416	4.5	2.4	1.95	1.70	.25
120 to 180	33,929	63.9	33.9	1.91	1.69	.22
193	7,171	13.5	7.1	1.61	1.67	-.06
Smaller than 195	9,587	18.1	9.6	1.42	1.66	-.24
All Sizes	53,103	100.0	53.0	1.78	1.68	.10
U. S. No. 1						
110 and larger	131	1.2	.1	2.22	1.70	.52
120 to 180	6,876	63.3	6.9	2.00	1.69	.31
193	1,532	14.1	1.5	1.66	1.67	-.01
Smaller than 195	2,324	21.4	2.3	1.37	1.65	-.28
All Sizes	10,863	100.0	10.8	1.82	1.68	.14
U. S. No. 2						
110 and larger	--	--	--	--	--	--
120 to 180	159	41.2	.2	1.03	1.63	-.60
193	83	21.6	.1	1.00	1.63	-.63
Smaller than 195	143	37.2	.1	.66	1.61	-.95
All Sizes	385	100.0	.4	.88	1.62	-.74
Unclassified						
110 and larger	133	9.2	.1	1.29	1.64	-.35
120 to 180	1,134	77.9	1.1	1.16	1.63	-.47
193	115	7.9	.1	.93	1.62	-.69
Smaller than 195	73	5.0	.1	1.18	1.63	-.45
All Sizes	1,455	100.0	1.4	1.15	1.63	-.48
All Grades						
110 and larger	5,586	5.7	5.7	1.81	1.68	.13
120 to 180	61,975	61.8	61.8	1.95	1.69	.26
193	14,275	14.2	14.2	1.63	1.66	.03
Smaller than 195	18,324	18.3	18.3	1.42	1.65	.23
All Sizes	100,160	100.0	100.0	1.80	1.68	.12

(Continued)

Table XVI (continued)

Season's Average Net Returns to Growers/1 from New York Auction

Sales of Oregon and Washington Winter Nelis Pears,

by Grades and Size Groups, 1937-38 Season

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1. "Net Returns to Growers" in this computation means the returns for bare fruit delivered to the packing house.
 2. The average marketing costs for the season are computed from the weekly marketing charges. For Winter Nelis pears these consist of freight, refrigeration, packing (incl. box), loading and warehousing, storage, and terminal auction charges. All charges except storage and auction charges are assumed to be the same throughout the season, irrespective of time and volume of sale or grade of pears. Freight charges amount to \$.715 per box, refrigeration (Rule 247) \$.09 per box, packing \$.50 per box, loading and warehousing, \$.05 per box, or a total of fixed charges of \$1.355 per box. Storage charges are approximately 20 cents for the season. They are assumed to begin on Oct. 25 and increase by one cent per week until March 12 when the full 20 cents is charged for the remainder of the season. Auction charges are calculated at 7 per cent of the weekly average gross receipt per box.
 3. Includes 2,907 boxes of Special Pack sold at an average price of \$1.79 per box.

Purchasing Power Parity

Prices received by growers since 1930 have been considerably below the level of prices necessary to give producers of Pacific Coast fall and winter pears a purchasing power per unit comparable to that which prevailed during the base period 1919 to 1928.

During the 1937-38 season the average price received by growers for the major varieties of California late pears, as shown in table ^{XVII,} was 95 cents per box below parity, or in other words amounted to only 22 per cent of the average price for the period 1920 to 1928. For the 1936-37 season the farm price was 44 per cent of parity.

Purchasing power parity calculations for Oregon and Washington d'Anjou and Beurre Bosc pears are presented in tables ^{XIX.} ~~XVIII~~ and / D'Anjou pears grown in the Medford District of Oregon during the 1937-38 season averaged \$1.13 below the level of prices necessary to give growers in that district a purchasing power per unit equivalent to prices obtained during the period 1919 to 1928. Prices of Washington d'Anjou pears during the past season were only 9 per cent of parity. Beurre Bosc pears grown in the Medford District of Oregon were 11 per cent of prices received during the base period, while growers of Beurre Bosc pears in the state of Washington incurred an average loss of 28 cents per box, the price being \$1.83 per box below the parity price of \$1.55 per box.

Table XVII

Purchasing Power Parity of California Fall and Winter Pears/1

In Terms of Dollars Per Box/2

Season	New York : Auction : Price :	Farm : Price :	Index : of Prices : Paid by : Farmers/4 :	Parity : Price :	Actual Price : Above () : or Below (-) : Parity :	Actual Price : in Per Cent : of Parity : Price :
	1	2	3	4	5	6
	dollars per box	dollars per box	per cent	dollars per box	dollars per box	per cent
1920-28 Avg.	3.57	1.53	100.0	1.53	--	100.0
1929	3.32	1.35	94.6	1.38	-.03	97.8
1930	2.15	.20	85.6	1.31	-1.11	15.3
1931	2.44	.55	72.6	1.11	-.56	49.5
1932	1.68	.09	64.6	.99	-.90	9.1
1933	1.83	.22	73.0	1.12	-.90	19.6
1934	2.17	.46	78.8	1.21	-.75	38.0
1935	1.96	.22	76.5	1.17	-.96	18.8
1936	2.31	.54	81.0	1.24	-.70	43.5
1937	2.02	.27	79.7	1.22	-.95	22.1

- /1. Varieties included are Beurre Hardy, Beurre Bosc, d'Anjou, du Comice, Beurre Clairgeau, Winter Nelis, Easter Beurre, Glout Merceau, and P. Barry.
- /2. Standard boxes of approximately 48 pounds net.
- /3. Weighted average New York auction price of the above varieties minus estimated direct harvesting and marketing charges to obtain a price per box of pears on the tree.
- /4. July to June average.

Source of data: Col. 1, New York Daily Fruit Reporter.
 Col. 2, New York auction price minus direct harvesting and marketing charges.
 Col. 3, U. S. Dept. Agr., Bur. Agr. Econ., Div. Statistical & Historical Research.
 Col. 4, 5, and 6, Computed.

Table XVIII

Purchasing Power Parity of Oregon d'Anjou and Beurre Bosc Pears/4,

1929-1937, and 1919-1928 Averages

(In Terms of Dollars Per Box)

Season	Farm Price/1	Index of Prices Paid by Farmers/2	Parity Price	Actual Price Above (+) or Below (-) Parity	Actual Price in Per Cent of Parity Price
	1	2	3	4	5
	dollars	per cent	dollars	dollars	per cent
<u>D'ANJOU</u>					
1919-1928 Avg.	1.70	100.0	1.70	--	100.0
1929	2.06	94.6	1.61	+ .45	128.0
1930	.64	85.6	1.46	- .82	43.8
1931	1.31	72.6	1.23	+ .08	106.5
1932	.30	64.6	1.10	- .80	27.3
1933	.95	73.0	1.24	- .29	76.6
1934	.98	78.8	1.34	- .36	73.1
1935	.43	76.5	1.30	- .87	33.1
1936	1.07	81.0	1.38	- .31	77.5
1937	.22/3	79.7	1.35	- 1.13	16.3
<u>BEURRE BOSCO</u>					
1919-1928 Avg.	2.03	100.0	2.03	--	100.0
1929	1.57	94.6	1.92	- .35	81.8
1930	- .13	85.6	1.74	- 1.87	--
1931	.91	72.6	1.47	- .56	61.9
1932	- .18	64.6	1.31	- 1.49	--
1933	.16	73.0	1.48	- 1.32	10.8
1934	.40	78.8	1.60	- 1.20	25.0
1935	.49	76.5	1.55	- 1.06	31.6
1936	.57	81.0	1.64	- 1.07	34.8
1937	.18/3	79.7	1.62	- 1.44	11.1

XI

- /1. Net returns as given in table/ minus \$.15 for picking and hauling.
- /2. July to June average. Converted from 1910-1914 base by dividing by 155.8.
- /3. New York auction price reduced to "on tree" price.
- /4. Grown in the Medford District.

Table XIX

Purchasing Power Parity of Washington d'Anjou and Beurre Bosc

Pears, 1929-1937, and 1919-1928 Averages

(In Terms of Dollars Per Box)

Season	Farm Price/1	Index of Prices Paid by Farmers/2	Parity Price	Actual Price Above (+) or Below (-) Parity	Actual Price in Per Cent of Parity Price
	1	2	3	4	5
	dollars	per cent	dollars	dollars	per cent
<u>D'ANJOU</u>					
1919-1928 Avg.	1.79	100.0	1.79	--	100.0
1929	1.93	94.6	1.69	+ .24	114.2
1930	.84	85.6	1.53	- .69	54.9
1931	.87	72.6	1.30	- .43	66.9
1932	.55	64.6	1.16	- .61	47.4
1933	.55	73.0	1.31	- .76	42.0
1934	.71	78.8	1.41	- .70	50.4
1935	.49	76.5	1.37	- .88	35.8
1936	.66	81.0	1.45	- .79	45.5
1937	.13/3	79.7	1.43	- 1.30	9.1
<u>BEURRE BOSC</u>					
1919-1928 Avg.	1.94	100.0	1.94	--	100.0
1929	1.52	94.6	1.84	- .32	82.6
1930	.26	85.6	1.66	- 1.40	15.7
1931	.54	72.6	1.41	- .87	38.3
1932	- .17	64.6	1.25	- 1.42	--
1933	.04	73.0	1.42	- 1.38	2.8
1934	.22	78.8	1.53	- 1.31	14.4
1935	.20	76.5	1.48	- 1.28	13.5
1936	.35	81.0	1.57	- 1.22	22.3
1937	- .28/3	79.7	1.55	- 1.83	--

XII

- /1. Net returns as given in table / minus \$.15 for picking and hauling.
- /2. July to June average. Converted from 1910-1914 base by dividing by 155.8.
- /3. New York price reduced to "on tree" price.

Producing Areas

Production of fall and winter pears is limited almost entirely to the three Pacific Coast states of Oregon, Washington and California. A small volume of these late dessert varieties, which is estimated not to exceed 5 percent of the United States total, is reported by official and private sources to be produced in the states of Michigan, Colorado and New York. Production in these states is so insignificant in volume compared with late pear production in the three Pacific Coast states and with the possible exception of Colorado is so scattered that it may well be disregarded and considered as not having any appreciable effect upon the marketing of Pacific Coast fall and winter pears.

According to acreage and tree surveys recently completed in the three Pacific Coast states, the total acreage of late pears is approximately 28,500 acres, of which 34 percent are located in California, 43 percent in Oregon, and 23 percent in Washington. The surveys further show that fall and winter pear production is concentrated in six major districts, two in each of the three states.

Over one-half of the acreage of winter pears in California is located in six counties comprising the Santa Clara Valley District. The counties in this district, which include a total of 5,630 acres planted to late pear varieties, are Alameda, Monterey, San Benito, San Mateo, Santa Clara and Santa Cruz. The Sacramento Valley-Foothill District, comprising twelve counties with greatly varying local conditions of production and extending from the lower Sacramento River Valley

into the foothill regions of the Sierra Mountains, includes almost one-third of California's late pear acreage, a total of 3,050 acres. The counties in this area are Butte, Colusa, Contra Costa, Eldorado, Glenn, Nevada, Placer, Sacramento, Solano, Sutter, Yolo and Yuba. The most important winter pear producing counties in this district, however, are Placer and Eldorado Counties.

In the state of Oregon two counties are outstanding in late pear production, namely, Jackson County in the southwestern part of the state and Hood River County in the north central part. Jackson County, combined with Josephine County, comprises the Medford District which includes approximately 561,000 fall and winter pear trees or a total of 7,200 acres. The Hood River District includes Hood River County in Oregon and parts of Skamania and Klickitat Counties in the state of Washington. Because of great similarity in the natural and economic conditions existing between the area in Oregon and the adjoining area across the Columbia River in Washington, they are considered one district. The tree number of other than Bartlett pears as given in the Northwest Fruit and Berry Survey converted into acres indicates a total of 3,280 acres planted to late varieties in this district.

In the state of Washington the Yakima District, including Yakima and Benton Counties, and the Wenatchee-Okanogan District, including Chelan, Okanogan, Douglas and Grant Counties, are the most important fall and winter pear producing areas. The Yakima District

with a total late pear acreage of approximately 3,720 acres is the more important of the two areas. The Wenatchee-Okanogan District has about 2,000 acres planted to late varieties.

Volume and Trend of Production

Revised production estimates published by the Bureau of Agricultural Economics and presented in table XX give the production of other than Bartlett pears for the period 1925 to 1937. /2 On the average of the five-year period 1933-1937, the production of late pears on the Pacific Coast amounted to 109,570 tons, an increase of 22 percent over the preceding five-year period 1928-1932. Early estimates for the 1938 season indicate a total production of other than Bartlett pears of approximately 148,000 tons. Of the total Pacific Coast late pear production on the average of the most recent five-year period, 27 percent originated in California, 43 percent in Oregon and 30 percent in Washington. The same proportions are indicated for the 1938 crop.

Comparing the average production during the years 1933-1937 with that for the period 1928-1932 by individual states, it will be noted that production in California increased by 6 percent, in Oregon by 26 percent and in Washington by 33 percent. In all three states

/2. For the whole Pacific Coast the production of other than Bartlett pears amounted to 26 percent of the total pear production on the average for the 1933 to 1937 seasons. In California, the proportion of fall and winter pears of the total was 14 percent; in Oregon, 58 percent; and in Washington, 26 percent.

Table XX.

Production of Fall and Winter Pears in the Pacific Coast States
1925 to 1937

Year	California	Oregon	Washington	Pacific Coast
	1	2	3	4
- - - <u>tons</u> - - -				
1925	18,000	17,180	9,650	44,830
1926	23,000	35,620	12,950	71,570
1927	20,000	35,000	10,900	65,900
1928	21,100	38,650	24,320	84,070
1929	18,000	38,250	15,880	72,130
1930	34,000	48,780	31,300	114,080
1931	30,100	20,000	28,180	78,280
1932	35,400	40,520	25,120	101,040
Av. 1928-1932	27,720	37,240	24,960	89,920
1933	36,600	41,020	26,000	103,620
1934	40,800	33,580	26,300	100,680
1935	17,700	48,120	36,800	102,620
1936	28,400	52,000	35,000	115,400
1937	23,000	60,800	41,720	125,520
Av. 1933-1937	29,300	47,105	33,165	109,570

Source of data: U. S. D. A., Bur. Agr. Econ., Div. Crop and Livestock Estimates.

indications point toward a much larger crop in 1938. The indicated increase for this year over the preceding five-year average is 37 per cent in California, 36 per cent in Oregon, and 33 per cent in Washington. In the two latter states the 1938 late pear crop promises to be the largest on record.

Information given in the three state surveys with regard to the age distribution of fall and winter pear plantings on the Pacific Coast indicates that further increases in late pear production must be expected in the near future. Nearly all, that is, 97 per cent of the fall and winter pear trees standing at present were planted during the past thirty years. Trees of an age of ten years or less amount to over one-third of all trees standing. Increased production, judging from the age of the trees, will occur, particularly in the two northwestern states, but a substantial increase can also be foreseen for late pear production in California.